SEQUENCE LISTING

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<120> Compositions and Methods Relating to Breast Specific Genes and Proteins

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<213> Homo sapien

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cggagtaaca gctgatccag ctgacacgta tccagctact ggtcctgctg atgatgaagc 180

ccctgatgct gaaaccactg tctgctgcaa ccactgcaac cactgctgct cctaccactg 240

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tacgatatcc ccattgtagt ctcgtaatca gtttattttc tttcaaataa aaaataacta 480

tgagcaacaa aaaagaaaaa acaaaaaaaa aaacaaaaaa aaaagcggtc ggggggtacc 540

tcaggggcca aacgctggtt cccgggggta gaactgggta cccggctcac aatcccacca 600

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cgcac 665

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<211> 762
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<213> Homo sapien

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cgcactgggc ctaagtgctt tttaactatg tgaaatgttt ctttccttga ttgatgccaa 480

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ttttttctgg agggtaatta aatttaacga ggggtttttg aaaggtgccc tcaaaaaaaa 660

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<211> 930
<212> DNA
<213> Homo sapien

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gcagaggcgg aggctcgcgt attcctgcag tcagcaccca cgtcgccccc ggacgctcgg 300

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gaaaacgata gagaggagag gagaagagag 930

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<211> 1500
<212> DNA
<213> Homo sapien

<400> 16
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gatgaggatg gtgagtggtg gatagccaaa caacgaggga aaagggccat cacagacaat 180

gacatgcaga gtattttgga ccttcataat aaattacgaa gtcaggtgta tccaacagcc 240

tctaatatgg agtatatgac atgggatgta gagctggaaa gatctgcaga atcctgggct 300

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tctggccctg tatgtacaca ttatacacag gtcgtgtggg caactagtaa cagaatcggt 540

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gttgatgtaa tgcctgtgga caaaagaaag acctacattg cttcttttca gaatggaatc 1440

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<211> 296
<212> DNA
<213> Homo sapien

<400> 17
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ggctgctggc agaattcagt ttcttgcagg gctgggacgg aggtccccag tcccagctgc 180

ttaggggcca ccacactcct cggccctcct ctaaggccag cagcgcaggt gcggccctcc 240

tcgggttcta acctctcctg cttctggcat ctctcagact cagcaggaaa ggctct 296

<210> 18
<211> 1098
<212> DNA
<213> Homo sapien

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tggtcacatg actgacagag acaaccatgg tgacacagct cttttcagct gttcatcacc 180

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agtgttctga gtccctgg 1098

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<211> 319
<212> DNA
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<400> 19
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caggttctgt gaaaggactt attttttaac tgtaatattt attagtttta aaatatttgt 240

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taccagttga atggggtta 319

<210> 20
<211> 687
<212> DNA
<213> Homo sapien

<400> 20
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gactccaatg tgggcaagac atgcctgacc taccgcttct gcgctggccg cttccccgac 180

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gacttggcac aaaaatttgc tgacacacac agtatgcctt tgtttgaaac gtctgctaaa 540

aaccccaatg ataatgacca tgtggaagct atatttatga ccttggctca taagcttaag 600

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ccaaagcctg caatgacgtg ctggtgc 687

<210> 21
<211> 159
<212> DNA
<213> Homo sapien

<400> 21
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ttagtggcca gcaatatttt ttaactcatt ccaaccagg 159

<210> 22
<211> 2687
<212> DNA
<213> Homo sapien

<400> 22
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caagcgggac tcaaccagga ggacccaagg gaacccgata gagtacg 2687

<210> 23
<211> 539
<212> DNA
<213> Homo sapien

<400> 23
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cagggttgtt ttttgtttta accctgctta ataatgttgg tgttttagaa gtagatacag 480

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<210> 24
<211> 3262
<212> DNA
<213> Homo sapien

<400> 24
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gaatgttatc acctgtttgt caaagcttgt ttaaattata aaacactttt aattatatat 660

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<210> 25
<211> 703
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
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<223> a, c, g or t

<400> 25
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aagcactgtt gggtgcgtcg acgagcagcg agcatgaatc accgtgaggg ataagatgat 300

gcgagaccac gccgtggaca ataagtggat gaaaccccta tctcctaaca taataaaaac 360

taacaaaata attacgacca gggctagtgg ggagctagtg tcgctcgtga taactcccga 420

gactacatca gaggagagcc gatgaggagc agaggaagaa aatcactgga tgaagccgat 480

gaggaaggga tgggaggagt aacgagatga ggccgagtaa tcacgaccaa taacatctcg 540

cagcccgtag tgataagtag agcagagaat taccacgtcg caaaaaaaaa aaaaaaaaaa 600

aaaaaagagg cgggaggaaa agaggggaaa aaagaaggac accgggggaa aaagggtaac 660

ccagggaaaa aatcccaaaa ataccacgca aaaacgaaga agg 703

<210> 26
<211> 811
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (333)..(333)
<223> a, c, g or t

<400> 26
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ttgtcaaact catggcactg tttaccaaag agagttcatt ttactgtgtc taaattcgac 180

ttcaataaga gcagattaca aaatgatatt caagaggaat ccagtgtgtg tgtgtgcgtg 240

tgtgtgtgtg ttgtgtgtgt gtgttgtgtg tgtgtgtgtg tgctacatat aataaataat 300

caggcggcca gcggcagtag tagtaatcac tantcgtgat atactcctaa gcactgttgg 360

gtgcgtcgac gagcagcgag catgaatcac cgtgagggat aagatgatgc gagaccacgc 420

cgtggacaat aagtggatga aacccctatc tcctaacata ataaaaacta acaaaataat 480

tacgaccagg gctagtgggg agctagtgtc gctcgtgata actcccgaga ctacatcaga 540

ggagagccga tgaggagcag aggaagaaaa tcactggatg aagccgatga ggaagggatg 600

ggaggagtaa cgagatgagg ccgagtaatc acgaccaata acatctcgca gcccgtagtg 660

ataagtagag cagagaatta ccacgtcgca aaaaaaaaaa aaaaaaaaaa aaaagaggcg 720

ggaggaaaag aggggaaaaa agaaggacac cgggggaaaa agggtaaccc agggaaaaaa 780

tcccaaaaat accacgcaaa aacgaagaag g 811

<210> 27
<211> 652
<212> DNA
<213> Homo sapien

<400> 27
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ggattggtcg cggccgaggt acttctaccc gagcacagac tgtgtggact ttgccccctc 120

agcagccgcc accagtgatt tctataagag ggaaacaaac tgtgacatct gctatagtta 180

atagaaatta cagtaattca gaacatggca tgggtatatc tatttttcta ccacgtctag 240

atgacactgc aaaatatgca acttggtaac acaatatccc aagcacagtt tacatgtcac 300

tatttccaat tttctgatgc taagcattca tatgaagtcc tcagacccgg tcacagcgcc 360

actcctactt tgtatgctca tagtttaaat ttttgtagga aactttcaat tgttttactt 420

tttgtataac gaacaaatgc tgtctccttt tttactaata aataatttgt attacaaaaa 480

aaaaaaaaaa aaaaaaaaaa ggcgggggggg taatcagggg ccaatacgcg ggttcccggg 540

gggagaatgg gttacccggt cacagttcca cacatttgcg agacaacaga cgggagaaga 600

ggcaggacca agacgcgagg cacgccaaga gcaagcgcac agagaaacgg ag 652

<210> 28
<211> 1511
<212> DNA
<213> Homo sapien

<400> 28
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gggagcgagg gagggagttc ctcgggcctg gccccctttac taggtcagtc tggcaggtac 180

ctcgccggcc caggacgggg ctggccaaac ctcaccgctt gctcccgggc tggcttccag 240

accaagggca cgcagaggtc ggagcctgcc cagaagccac acctggccag aaaaaccgaa 300

ggtgtatcaa ggtgtccgag tgaagatcac agtgaaggag ctgctgcagc aaagacgggc 360

acaccaggcg gcctccgggg gaacccggtc cggaggcagc agtgtccacc tttcagaccc 420

agttgcacca tcttctgcag gactgtattt tgagcctgaa ccaatttctt ccacgcccaa 480

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cacacaaagt gctccacacc atttcccaga cagcttccag gccacccctt tctgctttaa 660

ccagagcctg atcccaggat caccttcaaa ttcctccatt ctctctggct ccttagacta 720

cagttactcg ccagtgcagc tgccttcata tgctccagag aattacaatt cccctgcttc 780

tctggacacc agaacctgtg gctacccccc agaagaccat tcctaccaac acttgtcctc 840

acacgcccag tacagctgct tctcctcggc caccacctcc atctgctact gcgcatcgtg 900

tgaggcagag gacttggatg ctctccaggc ggcagagtac ttctacccga gcacagactg 960

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tgacatctgc tatagttaat agaaattaca gtaattcaga acatggcatg ggtatatcta 1080

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taattttgta ttactaaaaa aaaaaaaaaa aaaaaaattg gcgggggggt aatcaggggc 1380

caatacgcgg gttcccgggg ggagaatggg ttacccggtc acagttccac acatttgcga 1440

gacaacagac gggagaagag gcaggaccaa gacgcgaggc acgccaagag caagcgcaca 1500

gagaaacgga g 1511

<210> 29
<211> 337
<212> DNA
<213> Homo sapien

<400> 29
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atgcatggtc gcggcgaggt gcaggaaaat atacagatat taaagatcag atttaattct 120

ttggtataag catgaaactg ttactgatag ctttccatgg cgagcataaa ccatgaagca 180

actcaagaag catgagagac aacaatgaaa tctagtatac aatgcagggc aggccaagaa 240

cgatgtctgc tttacaggaa aagtcaacac taacaatcta ctcctgagaa actaacacct 300

atttagatgt ttttaacata atggcaaact aaaatgt 337

<210> 30
<211> 954
<212> DNA
<213> Homo sapien

<400> 30
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gcccgcagca atgaaaacct cgacaaaata gatatgtctt tggatgatat catcaagttg 120

aatcgaaagg aagggaagaa gcagaatttt ccaagactaa atagaagact cctccagcaa 180

agtggtgccc agcaattcag gatgagagtg cgatggggaa tccaacagaa ttctggtttt 240

ggtaagacta gtctgaatcg tagaggaaga gtaatgcctg gaaagagacg tcctaatgga 300

gttatcactg gccttgcagc taggaaaacg actggaattc gaaaaggaat tagtcctatg 360

aatcgtccac ctctaagtga caagaatata gaacaatatt ttccagtgtt aaaaaggaag 420

gcaaaccttc tgagacaaaa tgaagggcag aggaaaccag tagcagttct caagagacct 480

agccagctaa gcagaaaaaa taacattcca gctaatttta ccaggagtgg aaataaatta 540

aatcatcaga aagatactcg tcaggcaact tttcttttca gaagaggcct gaaggtgcag 600

gcccagttga atacagaaca actgctagac gatgtagtag caaagagaac tcgtcaatgg 660

cggacttcca ccacaaatgg agggattttg actgtatcta ttgacaatcc tggagcagtg 720

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aagcgggagc aaagtgacgt caagaaagtt cctaaaggtg ttcccctgca gtttgacata 840

aacagtgtcg gaaaacagac aaggattacg ttgaaataac ggtttgggat cctgaaggaa 900

caaaaagccc ctttcccata caacaaaagg ggaaacccct ttgtccccgt ggga 954

<210> 31
<211> 260
<212> DNA
<213> Homo sapien

<400> 31
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aggaaggtgt ggaaagttta tatccttaat ttgactactc ttggatatta aaatctttct 120

attaattaaa aagactttta gacaacctct taaatggaat tacactatgg aaaacagggc 180

tcccccaaaa acacctaggc agaactgaga gttctttgaa aaccattccc aataaaaact 240

aaatgaaaaa taaatataaa 260

<210> 32
<211> 1416
<212> DNA
<213> Homo sapien

<400> 32
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ggattaaaga tgaataacac aaattgggtc atgacattag aacctaacac actggtgctt 120

tttagggaag ttgttgacat ccaaatcaca gaaccaaggt caaaagcaaa atacaaaggt 180

accctcaaaa atatttacaa tgaagtaaat acactaacag aatttaaaac aggtacaaaa 240

tattgaaatg accaacgtta catgatttca agggttgtcc tttctgtgct ttttatctgt 300

cacgacagga aggtgtggaa agtttatatc cttaatttga ctactcttgg atattaaaat 360

ctttctatta attaaaaaga cttttagaca acctcttaaa tggaattaca ctatggaaaa 420

cagggctccc tcaaaaacac ctaggcagaa ctgagagttc tttgaaaacc attcccaata 480

aaaactaaat gaaaaataaa tttaaaacaa agcttaaaaa aatatgcatt acctgacacc 540

aacctttttct ggctgacaat atttattcat gaaaacatat cagctgtcta cctttaattt 600

gtggaccaat gttttgtgaa agctaaagag ggcaggggtt aaaatagggc ttgaatttct 660

cattctgtat agaccagcaa acttccctgt gcaaggcaag tttacatcac aaatccaaga 720

atgtttgcat cctaaatgct agtttgcttc agcccctagt taacctcagg acttggtttg 780

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gattttaata tccaagagta gtcaaattaa ggatataaac gatataaact ttccacacct 1080

tcctgtcgtg acagataaaa gcacagaaag gacaaccctt gaaatcatgt aacgttggtc 1140

atttcaatat tttgtacctg ttttaaattc tgttagtgta tttacttcat tgtaaatatt 1200

tttgagggta cctttgtatt ttgcttttga ccttggttct gtgatttgga tgtcaacaac 1260

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ctttaatcct gttttcagtc tctatgtgta cagcagtatt tttaataaag aattacagag 1380

ataaaaaaaa aaaaaaaaaa aaaaaaatat gcggtc 1416

<210> 33
<211> 302
<212> DNA
<213> Homo sapien

<400> 33
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ttaccagtaa aagtatgcat tttaaaagac gtttcagatt tatgcttttt acgtgaagct 120

gctaaactaa aagtaaatgg aagaaaccaa gtctagtagg ttttttcttt tttaggtggg 180

ggtgggatgg gggaggttag ttacacttaa aatatcttct ccagagactg tatgctccta 240

tactagactg taagctcttt gagggcagtc tgtcagattt atctttgtat cttccccagc 300

gg 302

<210> 34
<211> 1344
<212> DNA
<213> Homo sapien

<400> 34
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tatgtcaatg gaggtattat tttataatac ttgcattgac atgaagtggg ttcatggggg 120

aaaaccatga gctgtgaaca tggtagcaaa caagcatata ttcatttcaa aactttcctt 180

gcttttagca gagagaagcc tgtatatgtt acatgtgtga ctttcagtag tttaaagaga 240

tgtttcaaaa aattgttgca tgtttttgat gcaatttggg aaattgttta cttcacaatg 300

tagtcattca taaaaaaaat tcatgaaaat actgaacata tgtttgagga ttttttcttt 360

ccttttttaaa ttttttttatt ttttctgaga cggagatctg ctcttacgcc caggctagag 420

tgaagtggcg cgatcttggc ttactgcaac ctccaccccc caggttcaag cgattctcct 480

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tcaagtgatc cacctgcctc ggcctcccaa agtgttagga taacaggtgt gagccaccgt 660

gcccggctga agatttttct taattgcaat aaatattcag catttttttct aatgaaaatg 720

aattttgttt accagtaaaa gtatgcattt taaaagactt tcagatttat gctttttacg 780

tgaagctgct aaactaaaag taaatggaag aaaccaagtc tagtaggttt tttctttttt 840

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gctcctatac tagactgtaa gctctttgag ggcagtctgt cagatttatc tttgtatctt 960

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ctatgttctt tctgacttgc taagagagcc aagtgatagt ggctagtgat aagattgata 1260

cataaattgc tttactttga aataacactg gaaaacccta ccgtagacct gatcaagaaa 1320

aaaaaaaaaa aaaaatgagc ggcc 1344

<210> 35
<211> 163
<212> DNA
<213> Homo sapien

<400> 35
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ttctaaaccc aaaagtgcta cctaagaaga aatttagcca aaaaataccc agctaaggta 120

gccatagcca agtgtattta agtatgttat agaatatatt tga 163

<210> 36
<211> 643
<212> DNA
<213> Homo sapien

<400> 36
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tggatacaca tctgttcagc tctcatgaag ataaccaaac aactaaatag tggtattaca 120

cctccgttgc cctccaagac tgacaattat atgtatgcaa aaatgccagg ggaaggtttg 180

caagagaagt gataatggat gataatggaa ttgatactgt atttaggatc ctttgtttgt 240

tatcagtttt gtttgttaac tataaaatat tttccattgg aaaggggtac ctataaatgt 300

cttctgctgc taatatttat ctcagcactt tctaaaccca aaagtgctac ctaagaagaa 360

atttagccaa aaaataccca gctaaggtag ccatagccaa gtgtatttaa gtatgttata 420

gaatatattt gaaagcttcc tttcagtttg agctttgtat ctgctgtgga actgttatgg 480

ttgattgggt agttattttt cattcttata aggttcaaag taacagctga ggatttagaa 540

aacaagaata ccaaatagaa tacgaaataa taaagataaa ccaaaagaat accaaataat 600

aaagattttt aagaaatgga aaaaaaaaaa aaaaaaaaaa att 643

<210> 37
<211> 478
<212> DNA
<213> Homo sapien

<400> 37
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aagggcgaaa aagcaccata gggaaggaca taagaggtcc ctggagtcag acttgggaga 120

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ttttggtaat tctatttttcg cacttttcaa atgagatgca attagattag agactgtaaa 240

gtaaaagctg ccatgcttca ttttttttaaa accaattaaa cgccattttt atacggaagt 300

ttggacaaac aaaaacaaca aaaaaacaac aacaaaacag cttgggcggc tacttcggtg 360

gctcattacg cggtttccct ggtggtggac attgggtttc tccgctccac aattccccag 420

acaacttagg gacgcaagaa accccgatca caaaagcact cccacaacca cacacaca 478

<210> 38
<211> 833
<212> DNA
<213> Homo sapien

<400> 38
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ttaaaagttt agaccctcat acgaggtttg caatggttac tttaagtagg acggagattc 120

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aagagaagat cgttctcgta gtacacatgt ttatggagga atatcttaag atagaacact 240

aattcatatc tatgacaaaa aaaatcacgg tagttcgcaa catcgtaccc atggcatctg 300

gacttcttgc gctaaccgta gttacctgtg tatagaatcc acgttgttaa tcaatcagtg 360

aatcttcatt ctgcgcctga ttcgagaagt agaagacccg tcttctctac tttctcggct 420

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ttaatccagt ctacaaataa acaagacaat gcctgagtta gccctctata tagatttcag 540

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gttcatttta aaataattac tgattttgct tggggtaatc ccaacccctt accccaaatc 660

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<210> 39
<211> 718
<212> DNA
<213> Homo sapien

<400> 39
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tttatatttt tctctatctt ttaaattttg ctaatgtgca tagattcttt taaaataata 300

agaaaataat aaagttaata cgttataaaa aatagggacc tggctgttga agtgcgatgg 360

agacaatttg ttagaacatg tggcttgtta cacagacgct tgagaagttg ttgagagaga 420

acgattacct agaaacaaga gttacagtaa atggggtaaa aagggcaaaa gttcttcaga 480

ttactatcct atttaccaaa gtttgtgata tgtatttctg aatatattgt tgaagagctt 540

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cactcccaaa cagttaaaac cagctctaat ttccaatctg cagagtttta agcaaatgcc 660

ggattgtctg gacagagaaa atcctccaga ggagagccag agaaaataga tgtgaggg 718

<210> 40
<211> 1439
<212> DNA
<213> Homo sapien

<400> 40
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gaagaatgat tacacatagc ttgttacaga tttccaaaaa acagtaggta cagtttttaa 120

aatttacatt cacagagaat tttaatgaca ttggaaaatg taagaaactt tgaaaaaaga 180

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ttgagagaga acgattacct agaaacaaga gttacagtaa atggggtaaa aagggcaaaa 480

gttcttcaga ttactatcct atttaccaaa gtttgtgata tgtattttga atatatgtga 540

agagcttcac ttctatcaag ccatagcact tatttgtcac tctgatataa caatttaaca 600

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cgggaatggt cttgcaccag tatctttcta ttcatgttag cattttctat gtaagaaaca 720

aatacccaaa gacttttgta gtagagactc catctgttcc aatatagtca atatccttct 780

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accagatgtc ttctaaaagc gaggcagtct cctttaaata tgcattagag ctagcattac 960

tatcacactt agccttccaa ggctctaaaa gcagtggcaa aggagggcta aacatacaaa 1020

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aattgaatgt ttgtggttta gaggttttag gatataatat ttctcacttg aaagagtttt 1140

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gcagagtcct ggtctgcaat aatattgatg atcacgactt gtgtgttact atataaaatt 1320

caaccagtca aaattcaaca tctttaagaa tattgctact ttgggcaaaa tttgagtttc 1380

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<210> 41
<211> 298
<212> DNA
<213> Homo sapien

<400> 41
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tttcttgtga tttcaggcaa gaggcacata gaaactttgt atgagtgggg attttgtttt 180

aagtgctgga aaattagggc aggaattacg tgtttgcaag ttgtgccatc actggtttga 240

atttgactgc ctcatcaagg ggcaagagtt attcttgaag atctcattct cccagaaa 298

<210> 42
<211> 2023
<212> DNA
<213> Homo sapien

<400> 42
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gttaaatgac aggttaagtt gagtacaaag ctttcccagt actgctgaga ttaagacaat 120

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gaaagaggag tctttgggca ggtgagctgt ttcttgttga tttcaggcaa gaggcacata 240

gaaactttgt attgagtggg gattttgttt taagtgctgg aaaattaggg caggaattac 300

gtgtttgcaa gttgttgcca tcactggttt gaatttgact gcctcatcaa ggggcaagag 360

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<210> 43
<211> 667
<212> DNA
<213> Homo sapien

<400> 43
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attaacctga gctacccgcg ctctccctga caacggtgga caaagatttc ccacacggcg 540

gcctgcgcac gtggctcaac cagaagcccg cagccctcca tggcaacgca tccttccccg 600

aaccacacat ccagcaccac ccaagaagcc gcagcaccag cccgccccag cccggccccc 660

acccccc 667

<210> 44
<211> 495
<212> DNA
<213> Homo sapien

<220>

<221> misc_feature
<222> (220)..(220)
<223> a, c, g or t

<220>
<221> misc_feature
<222> (234)..(234)
<223> a, c, g or t

<220>
<221> misc_feature
<222> (262)..(262)
<223> a, c, g or t

<400> 44
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cactatccct tacaaaggca acctgacttt taataccata gattaatttt gtctgttttt 180

atactttata taaatgtaat caatcaatat gcaatctttn gtgtcagctt cttntgctct 240

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gcggtaacct caaggcggcc aataaggcgg ggtctcgcgg gtggtggaaa tatgggtgta 360

tactcgggcg ctcaaaatat cccaacacac aacactatat caagcggcac ggcaaaaaag 420

ggggaaaacc gaaaacaaga aaacagaaaa aaaaaaagaa aaaaaaaaaa aaacagaaaa 480

aaaaaaaaaa acgaa 495

<210> 45
<211> 651
<212> DNA
<213> Homo sapien

<400> 45
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atgaggtgat ctctctcatt gcggttttga ttcgcatttc cctaacggtt ggtgatactg 180

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aggacacagc tagaagctac catctgtgaa ccaggaagcc cccctcacca gacactgaat 480

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<210> 46
<211> 873
<212> DNA
<213> Homo sapien

<400> 46
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ctgattccca ctgagttacg ccgagaggct ctggccttac aggggtccct ggagtttgat 180

gatgctggag gtgaaggtgt gaccagccac gtggatgatg aataccgatg ggcaggagtc 240

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accgcacgca agagagtctt cctgagcacc gag 873

<210> 47
<211> 213
<212> DNA
<213> Homo sapien

<400> 47
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caggtactgg acacctggca tgctgactgc cacgtgcagg caagaaacat ctgtccagta 120

agttaggggg aagacgggat ggggaataaa ccctcggaaa tctctgcaca ccactcttgg 180

tgctatgctt ttaattctgt ttccctttct cct 213

<210> 48
<211> 658
<212> DNA
<213> Homo sapien

<400> 48
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agggaaggag acgattggag tcaactcaat gtgctcaaaa aaagaagagt cggggacctc 120

ctagccagtt acattccaga ggatgaggcg ctgatgcttc gggatggacg ctttgcttgt 180

gccatctgcc cccatcgacc ggtactggac accctggcca tgctgactgc ccaccgtgca 240

ggcaagaaac atctgtccag taagttaggg ggaagacggg atggggaata aaccctcgaa 300

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agaatgaatt gagaagggaa gaaaccaaag ctgaggctcc tctgctaact cagacacgac 480

ttatcaccca gagtgctctg cacagagctc cccactataa cagttgctgc cgccggaagt 540

acaggtatgg gacgggaaag ccagaggtag gaaggctcag aaggagacag atggctctaa 600

aagagttttc cagtgtgtat tctgaggaat actagtgttc tggagatgtt acttagtg 658

<210> 49
<211> 703
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (169)..(169)
<223> a, c, g or t

<400> 49
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cccctggcaa ccactccctt aagtgaagag tgacaacttt cctgggcant gtgctttcag 180

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tgtaactatt ctgagattat gaaatatcct tttatataca actatttttg tctcaaacat 300

gtttctttat acataaaaaa tagatatttc tgtttccatt ttttaatcaa attctgtcct 360

tatttcagaa gtgagaaaaa tcaatactcc aatattaaaa agcaggaata accatagttc 420

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gacatgggct tgtgacatgt ccaaggtcac aaggccagtt aacagcaagc taggatgaga 600

atccttctta ctagaactta gtattaatat taatgcgaca gctgggtatc atgtcatagc 660

tgttccggtg aatgtatcgt caaaaaaaaa aaaaaaaaaa aaa 703

<210> 50
<211> 1251
<212> DNA
<213> Homo sapien

<400> 50
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ccgagattgc gccgctgcac tccatcctag gcgacagggt gagcccctgt ctcaaaaata 360

aataaataaa caattcagtg gttcctagta cattcaaaca gttatacaac tatcaccact 420

attccaattc cagaacattc tcatcatcgc ccaaagaaac cacataccta ttagcagtca 480

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ttcctgggca ttgtgctttc agtagtatgt ggctttacat gtttccatta gaatttttaa 600

caccaaattc aagcagtgag ctttgtaact attctgagat tatgaaatat ccttttatat 660

acaactattt ttgtctcaaa catgtttctt tatacataaa aaatagatat ttctgtttcc 720

atttttaat caaattctgt ccttatttca gaagtgagaa aaatcaatac tccaatatta 780

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tgcttcccac agaatctgag gtgccaaggg ctgcaaggcc tttgagggca agctgcacat 900

tttacagatg aagaaacaga tccgacatgg gcttgtgaca tgtccaaggt cacaaggcca 960

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atgttatctt ttaagacctg taaggacatg actagtctat ttagccagag ggcccaaatc 1200

actcactgag acaaaacaaa gaagagccaa agttccagag ggacctgaga g 1251

<210> 51
<211> 402
<212> DNA

<213> Homo sapien

<400> 51
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ccttccacaa agattgtggt tgcaattctg ggcttctaag ttctggttac ttcatatttt 120

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atttccctgt aactaaataa atttcctcca ttgaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

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ttcccggtcc aaaatttccc caaaaaattg cggacacacc tg 402

<210> 52
<211> 1042
<212> DNA
<213> Homo sapien

<400> 52
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ccctagaggt ggtagctgct ttctgaagtt attatttcta gatgactttt ggtttttcag 960

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caatttcctc cattgaaaaa aa 1042

<210> 53
<211> 240
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (44)..(44)
<223> a, c, g or t

<400> 53
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gaatcgtggc tggtgcctct tctccatgct catcccatac cccagtgaca ggataccgtt 180

ccctgaagtt taaaaacatg caccacactt ccggtaaagg ctggagccac agaggcacct 240

<210> 54
<211> 1590
<212> DNA
<213> Homo sapien

<400> 54
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aattacaccc tcctggatga acccttccga agcacagaga actcagcagg gtcccagggg 240

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<210> 55
<211> 467
<212> DNA
<213> Homo sapien

<400> 55
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attttaagct actacaggcc aggtgcagtg gctcacacct gtaatcccag cactttggaa 120

ggccaagggg gggcggatca cgtaaggcca ggagttaaag accagcctgg ccaacatggc 180

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<210> 56
<211> 2970
<212> DNA
<213> Homo sapien

<400> 56
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cagctcaatg gtcttgtttg tgagtctgcg acatgtgtca atggggaggg ccctgcatcg 420

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cagatgtcag agcaggtgca cacattgaga gaggagaagg aatgtagcat gagtcgggta 1260

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gatggatgga tggatggatg aatagataga tggtgtttgc atgtaaattg cagagaaaac 5460
aaaaccaaag ctgattggaa acaattaatt gtgggtgtct gagggggaag gtcgcagctt 5520
tgggcagctt tgagaagcgg tacaagagct ctgtgcctgt gtgtccagcc ctggagccag 5580
ccagtgcatt tattttaagc tcttagaagc aactccttgg cccaggaatg cgtgacccct 5640

gagatgggtc cacgcatctc tctacacgtc cttctctccg tgggatactg gactcgtgcc 5700

tctgcgccca ttctcttctc acgcatatcc atgagcttta atttcacttt ctgatcacgg 5760

tacgtccata aagccagtat tacacttaaa tgaagtattc tttttgtaa tcgtttttt 5820

tagaaggtaa acaaatttaa taaagctacc aataatgtt 5859

<210> 66
<211> 93
<212> PRT
<213> Homo sapien

<400> 66

Met Gly Gly Asn Val Gly Arg Glu Thr Asn Val Pro Pro Gly Ala Ser
1 5 10 15

Phe Gly Pro Trp Val Pro Pro Ala Phe Phe Phe Phe Cys Phe Phe Val
20 25 30

Phe Phe Phe Lys Arg Arg Ile Leu Gly Phe Phe Gly Glu Thr Lys Ala
35 40 45

Asp Ile Lys Ser Tyr Lys Asp Phe Arg Phe Ser Phe Thr Lys Lys Val
50 55 60

Ile His Ile Leu His Tyr Thr Arg Tyr Asp Ile Asn Thr Gly Lys Tyr
65 70 75 80

Tyr Val His Cys Lys Glu Lys Gly Lys Ile Glu Thr Tyr
85 90

<210> 67
<211> 59
<212> PRT
<213> Homo sapien

<400> 67

Met Gly Lys Lys Ala His Arg His Leu Gln Phe Thr Ser Phe Lys Phe
1 5 10 15

Leu Lys Lys Thr Pro Gln Lys Lys Pro Phe Leu Pro Gly Lys Ala His
20 25 30

Glu Ile Asn Tyr Arg Ile Glu Leu Tyr Asn Ser Thr Ser Thr Ser Leu
35 40 45

Thr Leu Met Cys Phe Ala Lys Asn Leu Glu Lys
50 55

<210> 68
<211> 59
<212> PRT
<213> Homo sapien

<400> 68

Met Ser Ile Tyr Ser Phe Ile Leu Val Lys Asn Ile Arg Gln Ser Arg
1 5 10 15

Gly Arg Phe Lys Ser Glu Lys Lys Lys Lys Lys Lys Lys Lys Ser Ala
20 25 30

Gly Gly Thr Ser Gly Pro Lys Gly Ser Arg Gly Glu Leu Val Ser Arg
35 40 45

Pro Lys Phe Pro Pro Asn Phe Pro Pro Lys Gly
50 55

<210> 69
<211> 55
<212> PRT
<213> Homo sapien

<400> 69

Met Thr Ile Leu Asn Tyr Ser Ile Asn Met Arg Cys Trp Leu Lys Ser
1 5 10 15

Phe Ser Arg Leu Leu Met Ser Thr Ser Val Leu Val Phe Leu Gly Thr
20 25 30

Ser Tyr Phe Tyr Leu Gly Phe Trp Pro Tyr Leu Ser Ser Ile Thr Ser
35 40 45

Pro Glu Thr Ser His Gly Asn
50 55

<210> 70
<211> 69
<212> PRT
<213> Homo sapien

<400> 70

Met Ser Val Phe Phe Cys Val Lys Thr Pro Asp Thr Lys Thr Thr His
1 5 10 15

Lys Thr Asn Lys Arg Lys Glu Asn Val Ala Arg Ile Leu Val Ser Leu
20 25 30

Thr Val Glu Asp Pro Asp Gln Ala Val Gln Asn Val Ala His Gly Thr
35 40 45

Glu Arg Thr Gly Val Thr Thr Glu Ile Lys Phe Val Gly Leu Gly Val
50 55 60

Val Ala Pro Ser Gly
65

<210> 71
<211> 59
<212> PRT
<213> Homo sapien

<400> 71

Met Leu Ala Asp Ile Gly Val Leu Ile His Met Lys Trp Ile Asp Thr
1 5 10 15

Ser Ser Arg His His Thr Ala Val Gln Ser Ile Gln Gly Arg Glu Ala
20 25 30

Thr Ser Arg Leu Thr Thr Phe Leu Ala Gly Ser Gly Glu Leu Cys Pro
35 40 45

Arg Lys Pro Thr Arg Arg Ser Gly Thr Glu Glu
50 55

<210> 72
<211> 50
<212> PRT
<213> Homo sapien

<400> 72

Met Phe Cys Ser Glu Asn Thr Leu Pro Gln Asp Ile Leu Gln Leu Ser
1 5 10 15

Tyr Cys Ile Gln Leu Ser Ala Gln Val Leu Thr Asp Glu Thr Cys His
20 25 30

Pro Tyr Ser Thr Pro Cys Ser Ala Leu Leu Asn Ser Asn Ala His Met
35 40 45

Ala Pro
50

<210> 73
<211> 74
<212> PRT
<213> Homo sapien

<400> 73

Met Lys Gln Arg Ile Ser Lys Glu Thr Thr Lys Asp Ile Gly Asn Ser
1 5 10 15

Gln Lys Pro His Ala Asp Ala Glu Leu Gly Val Lys Asp Cys His Thr
20 25 30

Val Ser Asn Cys Arg Gly Val Cys His Ile Asp Ala Phe His Thr Leu
35 40 45

Glu Val Ala Arg Ala Ser Trp Val Thr Leu Pro Gln Arg Lys Asp Arg
50 55 60

Cys Val Pro Gly Gln Cys Arg Gly Glu Met
65 70

<210> 74
<211> 133
<212> PRT
<213> Homo sapien

<400> 74

Met Lys Ser Gln Glu Arg Met Asn Ser Cys Asp Gln Leu Gln Lys Thr
1 5 10 15

Gln Ala Asp Ser Ile Leu Arg Asp Thr Leu Tyr His Phe Gly Arg Ser
20 25 30

Pro Thr His Leu Gly Lys Thr Gly Met Ser Leu Arg Gly Ser Gly Arg
35 40 45

Ser Ser Arg Trp Leu Thr Val Val Gly Ala Ala Val Val Ala Val Val
50 55 60

Ala Ala Asp Ser Gly Phe Ser Ile Arg Gly Phe Ile Ile Ser Arg Thr
65 70 75 80

Ser Ser Trp Ile Arg Val Ser Trp Ile Ser Cys Tyr Ser Asp Leu Trp
85 90 95

Ala Glu Thr Thr Asn Asp Gly Thr Pro Gln Ser Thr Ser Pro Thr Ser
100 105 110

Ala Ile His Thr Leu Ala Pro Arg Arg His Asp Leu Glu Ala His Arg
115 120 125

Leu Ser Gly Tyr His
130

<210> 75
<211> 72
<212> PRT
<213> Homo sapien

<400> 75

Met Trp Ser Val Ser Pro Cys Ser Leu Pro Glu Gln Cys Leu Arg Phe
1 5 10 15

Glu Trp Asp Pro Thr Phe Val Asn Glu Ile Tyr His Leu Pro Arg Gln
20 25 30

Asn Asn Arg Phe Cys Pro Arg Cys Cys Asp Val Thr Met Val Ala Ile
35 40 45

Thr Ala Ile Thr Tyr Asn Tyr Trp His Thr Tyr Asp Glu Ser Arg Thr
50 55 60

Gly Pro Lys Cys Phe Leu Thr Met
65 70

<210> 76
<211> 93
<212> PRT
<213> Homo sapien

<400> 76

Met Ser Leu Cys Cys Asp Gly Pro Phe Pro Ser Leu Phe Gly Tyr Pro
1 5 10 15

Pro Leu Thr Ile Leu Ile His Val Leu Phe Gln Lys Val Ser Pro Ile
20 25 30

Lys Trp His Leu Gly Thr Thr Met Ala Gly Ile Ala Leu Ala Met Asn

35 40 45

Ser Thr Val Val Thr Leu Ser His Ser Arg Ala Val His Phe Ile Met
50 55 60

Asn Asp Leu Arg Ile Ser Pro Gly Lys Ser Pro Arg Gln Ala Leu Pro
65 70 75 80

Leu Leu Leu Ala Leu Gln Cys Glu Val Ser Trp Glu Arg
85 90

<210> 77
<211> 500
<212> PRT
<213> Homo sapien

<400> 77

Met Lys Cys Thr Ala Arg Glu Trp Leu Arg Val Thr Thr Val Leu Phe
1 5 10 15

Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr Leu Leu
20 25 30

Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu Trp Trp Ile
35 40 45

Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn Asp Met Gln Ser
50 55 60

Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln Val Tyr Pro Thr Ala
65 70 75 80

Ser Asn Met Glu Tyr Met Thr Trp Asp Val Glu Leu Glu Arg Ser Ala
85 90 95

Glu Ser Trp Ala Glu Ser Cys Leu Trp Glu His Gly Pro Ala Ser Leu
100 105 110

Leu Pro Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg Tyr Arg
115 120 125

Pro Pro Thr Phe His Val Gln Ser Trp Tyr Asp Glu Val Lys Asp Phe
130 135 140

Ser Tyr Pro Tyr Glu His Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys

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145                 150                 155                 160

Ser Gly Pro Val Cys Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser
                165                 170                 175

Asn Arg Ile Gly Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp
            180                 185                 190

Gly Gln Ile Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro
        195                 200                 205

Lys Gly Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys
    210                 215                 220

Ser Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys
225                 230                 235                 240

Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu Thr
                245                 250                 255

Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His Val Arg
            260                 265                 270

Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser Ala Gln Gln
        275                 280                 285

Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg Asp Gln Cys Lys
    290                 295                 300

Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala Gly Cys Leu Asp Ser
305                 310                 315                 320

Lys Ala Lys Val Ile Gly Ser Val His Tyr Glu Met Gln Ser Ser Ile
                325                 330                 335

Cys Arg Ala Ala Ile His Tyr Gly Ile Ile Asp Asn Asp Gly Gly Trp
            340                 345                 350

Val Asp Ile Thr Arg Gln Gly Arg Lys His Tyr Phe Ile Lys Ser Asn
        355                 360                 365

Arg Asn Gly Ile Gln Thr Ile Gly Lys Tyr Gln Ser Ala Asn Ser Phe
    370                 375                 380
```

Thr Val Ser Lys Val Thr Val Gln Ala Val Thr Cys Glu Thr Thr Val
385 390 395 400

Glu Gln Leu Cys Pro Phe His Lys Pro Ala Ser His Cys Pro Arg Val
405 410 415

Tyr Cys Pro Arg Asn Cys Met Gln Ala Asn Pro His Tyr Ala Arg Val
420 425 430

Ile Gly Thr Arg Val Tyr Ser Asp Leu Ser Ser Ile Cys Arg Ala Ala
435 440 445

Val His Ala Gly Val Val Arg Asn His Gly Gly Tyr Val Asp Val Met
450 455 460

Pro Val Asp Lys Arg Lys Thr Tyr Ile Ala Ser Phe Gln Asn Gly Ile
465 470 475 480

Phe Ser Glu Ser Leu Gln Asn Pro Pro Gly Gly Lys Ala Phe Arg Val
485 490 495

Phe Ala Val Val
500

<210> 78
<211> 51
<212> PRT
<213> Homo sapien

<400> 78

Met Val Thr Thr Gln Asn Leu Arg Leu Thr Ile Val Glu Val Arg Gly
1 5 10 15

Gln Gly Ala Gly Arg Ala Gly Ser Phe Leu Ser Ser Ile Met Gly Ala
20 25 30

Ala Gly Arg Ile Gln Phe Leu Ala Gly Leu Gly Arg Arg Ser Pro Val
35 40 45

Pro Ala Ala
50

<210> 79
<211> 50
<212> PRT
<213> Homo sapien

<400> 79

Met Val Phe Tyr Tyr Tyr Tyr Gly Phe Lys Lys Ser Asn Phe Ile
1 5 10 15

Ser Phe Cys Lys Glu Leu Ser Asn Ile Leu Tyr Arg Phe Cys Glu Arg
20 25 30

Thr Tyr Phe Leu Thr Val Ile Phe Ile Ser Phe Lys Ile Phe Val Ser
35 40 45

His Leu
50

<210> 80
<211> 229
<212> PRT
<213> Homo sapien

<400> 80

Met Ala Glu Glu Met Glu Ser Ser Leu Glu Ala Ser Phe Ser Ser Ser
1 5 10 15

Gly Ala Val Ser Gly Ala Ser Gly Phe Leu Pro Pro Ala Arg Ser Arg
20 25 30

Ile Phe Lys Ile Ile Val Ile Gly Asp Ser Asn Val Gly Lys Thr Cys
35 40 45

Leu Thr Tyr Arg Phe Cys Ala Gly Arg Phe Pro Asp Arg Thr Glu Ala
50 55 60

Thr Ile Gly Val Asp Phe Arg Glu Arg Ala Val Glu Ile Asp Gly Glu
65 70 75 80

Arg Ile Lys Ile Gln Leu Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg
85 90 95

Lys Ser Met Val Gln His Tyr Tyr Arg Asn Val His Ala Val Val Phe
100 105 110

Val Tyr Asp Met Thr Asn Met Ala Ser Phe His Ser Leu Pro Ser Trp
115 120 125

Ile Glu Glu Cys Lys Gln His Leu Leu Ala Asn Asp Ile Pro Arg Ile

130 135 140

Leu Val Gly Asn Lys Cys Asp Leu Arg Ser Ala Ile Gln Val Pro Thr
145 150 155 160

Asp Leu Ala Gln Lys Phe Ala Asp Thr His Ser Met Pro Leu Phe Glu
165 170 175

Thr Ser Ala Lys Asn Pro Asn Asp Asn Asp His Val Glu Ala Ile Phe
180 185 190

Met Thr Leu Ala His Lys Leu Lys Ser His Lys Pro Leu Met Leu Ser
195 200 205

Gln Pro Pro Asp Asn Gly Ile Ile Leu Lys Pro Glu Pro Lys Pro Ala
210 215 220

Met Thr Cys Trp Cys
225

<210> 81
<211> 42
<212> PRT
<213> Homo sapien

<400> 81

Met Asn Val Phe Lys Ile Tyr Asn Arg Thr Gln Ser Gly Arg Val Phe
1 5 10 15

Phe Gly Gly Arg Gly Leu Phe Ser Asn Ser Arg Trp His Ile Ser Gly
20 25 30

Gln Gln Tyr Phe Leu Thr His Ser Asn Gln
35 40

<210> 82
<211> 56
<212> PRT
<213> Homo sapien

<400> 82

Met Tyr Leu Lys Glu Lys Tyr Pro Asp Leu Lys Pro Thr Ala Asp Val
1 5 10 15

Ala Asn Phe His Thr Thr Ala Gly His Gly Ser Leu Leu Thr Thr His
20 25 30

Cys His Leu Arg Leu Cys Leu Cys Phe Ile Gln Arg Glu Arg Gly Gly
35 40 45

Leu Lys Gly Met Leu Pro Gly Gly
50 55

<210> 83
<211> 72
<212> PRT
<213> Homo sapien

<400> 83

Met Leu Ser Pro Phe Leu Leu Ile Asn Asn Leu Tyr Tyr Lys Lys Lys
1 5 10 15

Lys Lys Lys Lys Lys Arg Arg Gly Gly Asn Gln Gly Pro Ile Arg Gly
20 25 30

Phe Pro Gly Gly Glu Trp Val Thr Arg Ser Gln Phe His Thr Phe Ala
35 40 45

Arg Gln Gln Thr Gly Glu Glu Ala Gly Pro Arg Arg Glu Ala Arg Gln
50 55 60

Glu Gln Ala His Arg Glu Thr Glu
65 70

<210> 84
<211> 27
<212> PRT
<213> Homo sapien

<400> 84

Met His Val Glu Arg Arg Ser Val Met Asp Ala Trp Ser Arg Arg Gly
1 5 10 15

Ala Gly Lys Tyr Thr Asp Ile Lys Asp Gln Ile
20 25

<210> 85
<211> 292
<212> PRT
<213> Homo sapien

<400> 85

```
Met Asn Arg Phe Gly Thr Arg Leu Val Gly Ala Thr Ala Thr Ser Ser
1               5                  10                  15

Pro Pro Pro Lys Ala Arg Ser Asn Glu Asn Leu Asp Lys Ile Asp Met
            20                  25                  30

Ser Leu Asp Asp Ile Ile Lys Leu Asn Arg Lys Glu Gly Lys Lys Gln
        35                  40                  45

Asn Phe Pro Arg Leu Asn Arg Arg Leu Leu Gln Gln Ser Gly Ala Gln
    50                  55                  60

Gln Phe Arg Met Arg Val Arg Trp Gly Ile Gln Gln Asn Ser Gly Phe
65                  70                  75                  80

Gly Lys Thr Ser Leu Asn Arg Arg Gly Arg Val Met Pro Gly Lys Arg
                85                  90                  95

Arg Pro Asn Gly Val Ile Thr Gly Leu Ala Ala Arg Lys Thr Thr Gly
            100                 105                 110

Ile Arg Lys Gly Ile Ser Pro Met Asn Arg Pro Pro Leu Ser Asp Lys
        115                 120                 125

Asn Ile Glu Gln Tyr Phe Pro Val Leu Lys Arg Lys Ala Asn Leu Leu
    130                 135                 140

Arg Gln Asn Glu Gly Gln Arg Lys Pro Val Ala Val Leu Lys Arg Pro
145                 150                 155                 160

Ser Gln Leu Ser Arg Lys Asn Asn Ile Pro Ala Asn Phe Thr Arg Ser
                165                 170                 175

Gly Asn Lys Leu Asn His Gln Lys Asp Thr Arg Gln Ala Thr Phe Leu
            180                 185                 190

Phe Arg Arg Gly Leu Lys Val Gln Ala Gln Leu Asn Thr Glu Gln Leu
        195                 200                 205

Leu Asp Asp Val Val Ala Lys Arg Thr Arg Gln Trp Arg Thr Ser Thr
    210                 215                 220

Thr Asn Gly Gly Ile Leu Thr Val Ser Ile Asp Asn Pro Gly Ala Val
225                 230                 235                 240
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Gln Cys Pro Val Thr Gln Lys Pro Arg Leu Thr Arg Thr Ala Val Pro
                245                 250                 255

Ser Phe Leu Thr Lys Arg Glu Gln Ser Asp Val Lys Lys Val Pro Lys
            260                 265                 270

Gly Val Pro Leu Gln Phe Asp Ile Asn Ser Val Gly Lys Gln Thr Arg
        275                 280                 285

Ile Thr Leu Lys
    290
```


<210> 86
<211> 34
<212> PRT
<213> Homo sapien

<400> 86

```
Met Val Phe Lys Glu Leu Ser Val Leu Pro Arg Cys Phe Trp Gly Ser
1               5                   10                  15

Pro Val Phe His Ser Val Ile Pro Phe Lys Arg Leu Ser Lys Ser Leu
            20                  25                  30

Phe Asn
```

<210> 87
<211> 26
<212> PRT
<213> Homo sapien

<400> 87

```
Met His Thr Phe Thr Gly Lys His Asn Ser Phe Ser Leu Arg Lys Asn
1               5                   10                  15

Ala Glu Tyr Leu Leu Gln Leu Arg Lys Ile
            20                  25
```

<210> 88
<211> 129
<212> PRT
<213> Homo sapien

<400> 88

```
His Met Phe Glu Asp Phe Ser Phe Pro Phe Ala Ile Phe Leu Phe Phe
```

1 5 10 15

Leu Arg Arg Arg Ser Ala Leu Thr Pro Arg Leu Glu Ala Ser Gly Ala
20 25 30

Ile Leu Ala Tyr Cys Asn Leu His Pro Pro Gly Ser Ser Asp Ser Pro
35 40 45

Ala Ser Ala Ser Gly Val Ala Gly Ile Thr Gly Ala Arg His His Val
50 55 60

Arg Leu Ile Phe Val Phe Ser Val Glu Thr Gly Phe Cys Tyr Val Gly
65 70 75 80

Gln Ala Gly Leu Lys Leu Leu Thr Ser Ser Asp Pro Pro Ala Ser Ala
85 90 95

Ser Gln Ser Val Arg Ile Thr Gly Val Ser His Arg Ala Arg Leu Lys
100 105 110

Ile Phe Leu Asn Cys Asn Lys Tyr Ser Ala Phe Phe Glu Ser Leu Tyr
115 120 125

Leu

<210> 89
<211> 15
<212> PRT
<213> Homo sapien

<400> 89

Met Ala Thr Leu Ala Gly Tyr Phe Leu Ala Lys Phe Leu Leu Arg
1 5 10 15

<210> 90
<211> 71
<212> PRT
<213> Homo sapien

<400> 90

Met Lys His Gly Ser Phe Tyr Phe Thr Val Ser Asn Leu Ile Ala Ser
1 5 10 15

His Leu Lys Ser Ala Lys Ile Glu Leu Pro Lys Lys Cys Tyr Met Pro
20 25 30

Lys Gly Ala His Asn Tyr Leu Met Ala Lys Leu Ile Lys Leu Thr Ser
35 40 45

Pro Lys Ser Asp Ser Arg Asp Leu Leu Cys Pro Ser Leu Trp Cys Phe
50 55 60

Phe Ala Leu His Ile Cys Phe
65 70

<210> 91
<211> 35
<212> PRT
<213> Homo sapien

<400> 91

Met Leu Ala Arg Leu Leu Leu Met Ile Lys Ser Leu Asp Pro His Thr
1 5 10 15

Arg Phe Ala Met Val Thr Leu Ser Arg Thr Glu Ile Pro Leu Val Leu
20 25 30

Tyr Lys Arg
35

<210> 92
<211> 48
<212> PRT
<213> Homo sapien

<400> 92

Met Phe Thr Ser Thr Thr Leu Asn Gln Leu Leu Ser Ile Leu Tyr Ile
1 5 10 15

Phe Tyr Ser Ile Phe Phe Ser Asn Phe Leu His Phe Pro Met Ser Leu
20 25 30

Lys Phe Ser Val Asn Val Asn Phe Lys Asn Cys Thr Val Trp Leu Phe
35 40 45

<210> 93
<211> 67
<212> PRT
<213> Homo sapien

<400> 93

Met Cys Met Ser Arg Phe Glu Ser Leu Gly Cys Arg Phe Val Leu Pro
1 5 10 15

Trp Gln Arg Lys Arg Ser Leu Trp Gly Gly Glu Leu Phe Leu Val Ile
20 25 30

Ser Gly Lys Arg His Ile Glu Thr Leu Tyr Glu Trp Gly Phe Cys Phe
35 40 45

Lys Cys Trp Lys Ile Arg Ala Gly Ile Thr Cys Leu Gln Val Val Pro
50 55 60

Ser Leu Val
65

<210> 94
<211> 145
<212> PRT
<213> Homo sapien

<400> 94

Met Leu Pro Ala Gly Thr Leu Val Gly Ala Gly Leu Gly Val Pro His
1 5 10 15

Pro Gln Thr Pro Cys Phe Leu Gln Gly His Trp Trp Val Leu Ala Trp
20 25 30

Gly Phe Leu Thr His Lys His His Ala Ser Cys Arg Asp Val Asp Gly
35 40 45

Arg Trp Pro Gly Arg Ser Ser His Thr Thr Ala Met Leu Pro Ala Gly
50 55 60

Thr Leu Val Gly Ala Gly Leu Gly Leu Pro His Ile Gln Thr Pro Cys
65 70 75 80

Phe Leu Gln Gly Arg Trp Cys Ala Leu Ala Trp Gly Phe Leu Thr Tyr
85 90 95

Lys Pro His Ala Ser Tyr Arg Ala Arg Trp Trp Thr Ala Gly Pro Glu
100 105 110

Ala Ser Ser His Thr Ile Ala Ile Leu Pro His Gly Thr Leu Ala Ala
115 120 125

Arg Thr Gly Leu Gly Leu Pro His Pro Gln Thr Pro Cys Leu Pro Ile
130 135 140

Asp
145

<210> 95
<211> 48
<212> PRT
<213> Homo sapien

<400> 95

Met Gly Val Tyr Ser Gly Ala Gln Asn Ile Pro Thr His Asn Thr Ile
1 5 10 15

Ser Ser Gly Thr Ala Lys Lys Gly Glu Asn Arg Lys Gln Glu Asn Arg
20 25 30

Lys Lys Lys Arg Lys Lys Lys Lys Asn Arg Lys Lys Lys Lys Asn Glu
35 40 45

<210> 96
<211> 71
<212> PRT
<213> Homo sapien

<400> 96

Met Ala Gly Gly Ala Lys Glu Leu Pro Arg Ala Ser Phe Ile Arg Ala
1 5 10 15

Leu Ile Leu Cys Lys Arg Ala Glu Ser Ser Gly Pro Asn Arg Phe Pro
20 25 30

Lys Leu Leu Thr Leu Gly Met Arg Val Gln Tyr Thr Asn Phe Trp Gly
35 40 45

Thr Gln Thr Phe Arg Pro Gln Gln Tyr Pro Asn Tyr Ile Arg Asp Leu
50 55 60

Lys Ser Thr Thr Lys Asn Lys
65 70

<210> 97
<211> 291
<212> PRT
<213> Homo sapien

<400> 97

```
Met Leu Arg Arg Glu Ala Arg Leu Arg Arg Glu Tyr Leu Tyr Arg Lys
1               5                  10                  15

Ala Arg Glu Glu Ala Gln Arg Ser Ala Gln Glu Arg Lys Glu Arg Leu
            20                  25                  30

Arg Arg Ala Leu Glu Glu Asn Arg Leu Ile Pro Thr Glu Leu Arg Arg
        35                  40                  45

Glu Ala Leu Ala Leu Gln Gly Ser Leu Glu Phe Asp Asp Ala Gly Gly
    50                  55                  60

Glu Gly Val Thr Ser His Val Asp Asp Glu Tyr Arg Trp Ala Gly Val
65                  70                  75                  80

Glu Asp Pro Lys Val Met Ile Thr Thr Ser Arg Asp Pro Ser Ser Arg
                85                  90                  95

Leu Lys Met Phe Ala Lys Glu Leu Lys Leu Val Phe Pro Gly Ala Gln
            100                 105                 110

Arg Met Asn Arg Gly Arg His Glu Val Gly Ala Leu Val Arg Ala Cys
        115                 120                 125

Lys Ala Asn Gly Val Thr Asp Leu Leu Val Val His Glu His Arg Gly
    130                 135                 140

Thr Pro Val Gly Leu Ile Val Ser His Leu Pro Phe Gly Pro Thr Ala
145                 150                 155                 160

Tyr Phe Thr Leu Cys Asn Val Val Met Arg His Asp Ile Pro Asp Leu
                165                 170                 175

Gly Thr Met Ser Glu Ala Lys Pro His Leu Ile Thr His Gly Phe Ser
            180                 185                 190

Ser Arg Leu Gly Lys Arg Val Ser Asp Ile Leu Arg Tyr Leu Phe Pro
        195                 200                 205

Val Pro Lys Asp Asp Ser His Arg Val Ile Thr Phe Ala Asn Gln Asp
    210                 215                 220

Asp Tyr Ile Ser Phe Arg His His Val Tyr Lys Lys Thr Asp His Arg
```

225 230 235 240

Asn Val Glu Leu Thr Glu Val Gly Pro Arg Phe Glu Leu Lys Leu Tyr
245 250 255

Met Ile Arg Leu Gly Thr Leu Glu Gln Glu Ala Thr Ala Asp Val Glu
260 265 270

Trp Arg Trp His Pro Tyr Thr Asn Thr Ala Arg Lys Arg Val Phe Leu
275 280 285

Ser Thr Glu
290

<210> 98
<211> 39
<212> PRT
<213> Homo sapien

<400> 98

Met Ser Ile Arg Ala Trp Phe Pro Leu Ser Cys Arg Ala Ala His Val
1 5 10 15

Met Asp Pro Gly Arg Tyr Trp Thr Pro Gly Met Leu Thr Ala Thr Cys
20 25 30

Arg Gln Glu Thr Ser Val Gln
35

<210> 99
<211> 174
<212> PRT
<213> Homo sapien

<400> 99

Met Ser Phe Lys Arg Glu Gly Asp Asp Trp Ser Gln Leu Asn Val Leu
1 5 10 15

Lys Lys Arg Arg Val Gly Asp Leu Leu Ala Ser Tyr Ile Pro Glu Asp
20 25 30

Glu Ala Leu Met Leu Arg Asp Gly Arg Phe Ala Cys Ala Ile Cys Pro
35 40 45

His Arg Pro Val Leu Asp Thr Leu Ala Met Leu Thr Ala His Arg Ala
50 55 60

Gly Lys Lys His Leu Ser Ser Lys Leu Gly Gly Arg Arg Asp Gly Glu
65 70 75 80

Ala Thr Leu Glu Ile Ser Ala His His Ser Trp Cys Tyr Ala Phe Asn
85 90 95

Ser Val Ser Leu Ser Pro Gln Ala Leu Gln Leu Phe Tyr Gly Lys Lys
100 105 110

Gln Pro Gly Lys Glu Arg Lys Gln Asn Pro Lys His Gln Asn Glu Leu
115 120 125

Arg Arg Glu Glu Thr Lys Ala Glu Ala Pro Leu Leu Thr Gln Thr Arg
130 135 140

Leu Ile Thr Gln Ser Ala Leu His Arg Ala Pro His Tyr Asn Ser Cys
145 150 155 160

Cys Arg Arg Lys Tyr Arg Tyr Gly Thr Gly Lys Pro Glu Val
165 170

<210> 100
<211> 50
<212> PRT
<213> Homo sapien

<400> 100

Met Lys Tyr Pro Phe Ile Tyr Asn Tyr Phe Cys Leu Lys His Val Ser
1 5 10 15

Leu Tyr Ile Lys Asn Arg Tyr Phe Cys Phe His Phe Leu Ile Lys Phe
20 25 30

Cys Pro Tyr Phe Arg Ser Glu Lys Asn Gln Tyr Ser Asn Ile Lys Lys
35 40 45

Gln Glu
50

<210> 101
<211> 18
<212> PRT
<213> Homo sapien

<400> 101

Met Glu Glu Ile Tyr Leu Val Thr Gly Lys Leu Val Ile Gln Ala Leu
1 5 10 15

Glu Gly

<210> 102
<211> 34
<212> PRT
<213> Homo sapien

<400> 102

Met Ser Ser Gln Asn Arg Arg Cys Leu Gly Arg Asn Arg Gly Trp Cys
1 5 10 15

Leu Phe Ser Met Leu Ile Pro Tyr Pro Ser Asp Arg Ile Pro Phe Pro
20 25 30

Glu Val

<210> 103
<211> 40
<212> PRT
<213> Homo sapien

<400> 103

Met Asn Lys Gln Ile Tyr Cys Ser Ser Leu Lys Lys Phe Phe Phe Lys
1 5 10 15

Gln Ser His Ser Val Ala Gln Ala Gly Val Lys Gln Cys Asp Leu Ser
20 25 30

Ser Leu Gln Pro Pro Pro Pro Glu
35 40

<210> 104
<211> 990
<212> PRT
<213> Homo sapien

<400> 104

Met Ser Glu Glu Thr Arg Gln Ser Lys Leu Ala Ala Ala Lys Lys Lys
1 5 10 15

Leu Arg Glu Tyr Gln Gln Arg Asn Ser Pro Gly Val Pro Thr Gly Ala

```
                20                  25                  30

Lys Lys Lys Lys Lys Ile Lys Asn Gly Ser Asn Pro Glu Thr Thr Thr
        35                  40                  45

Ser Gly Gly Cys His Ser Pro Glu Asp Thr Pro Lys Asp Asn Ala Ala
    50                  55                  60

Thr Leu Gln Pro Ser Asp Asp Thr Val Leu Pro Gly Gly Val Pro Ser
65                  70                  75                  80

Pro Gly Ala Ser Leu Thr Ser Met Ala Ala Ser Gln Asn His Asp Ala
                85                  90                  95

Asp Asn Val Pro Asn Leu Met Asp Glu Thr Lys Thr Phe Ser Ser Thr
            100                 105                 110

Glu Ser Leu Arg Gln Leu Ser Gln Gln Leu Asn Gly Leu Val Cys Glu
        115                 120                 125

Ser Ala Thr Cys Val Asn Gly Glu Gly Pro Ala Ser Ser Ala Asn Leu
    130                 135                 140

Lys Asp Leu Glu Ser Arg Tyr Gln Gln Leu Ala Val Ala Leu Asp Ser
145                 150                 155                 160

Ser Tyr Val Thr Asn Lys Gln Leu Asn Ile Thr Ile Glu Lys Leu Lys
                165                 170                 175

Gln Gln Asn Gln Glu Ile Thr Asp Gln Leu Glu Glu Glu Lys Lys Glu
            180                 185                 190

Cys His Gln Lys Gln Gly Ala Leu Arg Glu Gln Leu Gln Val His Ile
        195                 200                 205

Gln Thr Ile Gly Ile Leu Val Ser Glu Lys Ala Glu Leu Gln Thr Ala
    210                 215                 220

Leu Ala His Thr Gln His Ala Ala Arg Gln Lys Glu Gly Glu Ser Glu
225                 230                 235                 240

Asp Leu Ala Ser Arg Leu Gln Tyr Ser Arg Arg Arg Val Gly Glu Leu
                245                 250                 255
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Glu Arg Ala Leu Ser Ala Val Ser Thr Gln Gln Lys Lys Ala Asp Arg
260 265 270

Tyr Asn Lys Glu Leu Thr Lys Glu Arg Asp Ala Leu Arg Leu Glu Leu
275 280 285

Tyr Lys Asn Thr Gln Ser Asn Glu Asp Leu Lys Gln Glu Lys Ser Glu
290 295 300

Leu Glu Glu Lys Leu Arg Val Leu Val Thr Glu Lys Ala Gly Met Gln
305 310 315 320

Leu Asn Leu Glu Glu Leu Gln Lys Lys Leu Glu Met Thr Glu Leu Leu
325 330 335

Leu Gln Gln Phe Ser Ser Arg Cys Glu Ala Pro Asp Ala Asn Gln Gln
340 345 350

Leu Gln Gln Ala Met Glu Glu Arg Ala Gln Leu Glu Ala His Leu Gly
355 360 365

Gln Val Met Glu Ser Val Arg Gln Leu Gln Met Glu Arg Asp Lys Tyr
370 375 380

Ala Glu Asn Leu Lys Gly Glu Ser Ala Met Trp Arg Gln Arg Met Gln
385 390 395 400

Gln Met Ser Glu Gln Val His Thr Leu Arg Glu Glu Lys Glu Cys Ser
405 410 415

Met Ser Arg Val Gln Glu Leu Glu Thr Ser Leu Ala Glu Leu Arg Asn
420 425 430

Gln Met Ala Glu Pro Pro Pro Pro Glu Pro Pro Ala Gly Pro Ser Glu
435 440 445

Val Glu Gln Gln Leu Gln Ala Glu Ala Glu His Leu Arg Lys Glu Leu
450 455 460

Glu Gly Leu Ala Gly Gln Leu Gln Ala Gln Val Gln Asp Asn Glu Gly
465 470 475 480

Leu Ser Arg Leu Asn Arg Glu Gln Glu Glu Arg Leu Leu Glu Leu Glu
485 490 495

Arg Ala Ala Glu Leu Trp Gly Glu Gln Ala Glu Ala Arg Arg Gln Ile
500 505 510

Leu Glu Thr Met Gln Asn Asp Arg Thr Thr Ile Ser Arg Ala Leu Ser
515 520 525

Gln Asn Arg Glu Leu Lys Glu Gln Leu Ala Glu Leu Gln Ser Gly Phe
530 535 540

Val Lys Leu Thr Asn Glu Asn Met Glu Ile Thr Ser Ala Leu Gln Ser
545 550 555 560

Glu Gln His Val Lys Arg Glu Leu Gly Lys Lys Leu Gly Glu Leu Gln
565 570 575

Glu Lys Leu Ser Glu Leu Lys Glu Thr Val Glu Leu Lys Ser Gln Glu
580 585 590

Ala Gln Ser Leu Gln Gln Gln Arg Asp Gln Tyr Leu Gly His Leu Gln
595 600 605

Gln Tyr Val Ala Ala Tyr Gln Gln Leu Thr Ser Glu Lys Glu Val Leu
610 615 620

His Asn Gln Leu Leu Leu Gln Thr Gln Leu Val Asp Gln Leu Gln Gln
625 630 635 640

Gln Glu Ala Gln Gly Lys Ala Val Ala Glu Met Ala Arg Gln Glu Leu
645 650 655

Gln Glu Thr Gln Glu Arg Leu Glu Ala Ala Thr Gln Gln Asn Gln Gln
660 665 670

Leu Arg Ala Gln Leu Ser Leu Met Ala His Pro Gly Glu Gly Asp Gly
675 680 685

Leu Asp Arg Glu Glu Glu Glu Asp Glu Glu Glu Glu Glu Glu Glu Ala
690 695 700

Val Ala Val Pro Gln Pro Met Pro Ser Ile Pro Glu Asp Leu Glu Ser
705 710 715 720

Arg Glu Ala Met Val Ala Phe Phe Asn Ser Ala Val Ala Ser Ala Glu
725 730 735

Glu Glu Gln Ala Arg Leu Arg Gly Gln Leu Lys Glu Gln Arg Val Arg
740 745 750

Cys Arg Arg Leu Ala His Leu Leu Ala Ser Ala Gln Lys Glu Pro Glu
755 760 765

Ala Ala Ala Pro Ala Pro Gly Thr Gly Gly Asp Ser Val Cys Gly Glu
770 775 780

Thr His Arg Ala Leu Gln Gly Ala Met Glu Lys Leu Gln Ser Arg Phe
785 790 795 800

Met Glu Leu Met Gln Glu Lys Ala Asp Leu Lys Glu Arg Val Glu Glu
805 810 815

Leu Glu His Arg Cys Ile Gln Leu Ser Gly Glu Thr Asp Thr Ile Gly
820 825 830

Glu Tyr Ile Ala Leu Tyr Gln Ser Gln Arg Ala Val Leu Lys Glu Arg
835 840 845

His Arg Glu Lys Glu Glu Tyr Ile Ser Arg Leu Ala Gln Asp Lys Glu
850 855 860

Glu Met Lys Val Lys Leu Leu Glu Leu Gln Glu Leu Val Leu Arg Leu
865 870 875 880

Val Gly Asp Arg Asn Glu Trp His Gly Arg Phe Leu Ala Ala Ala Gln
885 890 895

Asn Pro Ala Asp Glu Pro Thr Ser Gly Ala Pro Ala Pro Gln Glu Leu
900 905 910

Gly Ala Ala Asn Gln Gln Gly Asp Leu Cys Glu Val Ser Leu Ala Gly
915 920 925

Ser Val Glu Pro Ala Gln Gly Glu Ala Arg Glu Gly Ser Pro Arg Asp
930 935 940

Asn Pro Thr Ala Gln Gln Ile Met Gln Leu Leu Arg Glu Met Gln Asn
945 950 955 960

Pro Arg Glu Arg Pro Gly Leu Gly Ser Asn Pro Cys Ile Pro Phe Phe

965 970 975

Tyr Arg Ala Asp Glu Asn Asp Glu Val Lys Ile Thr Val Ile
980 985 990

<210> 105
<211> 91
<212> PRT
<213> Homo sapien

<400> 105

Met Ala Pro Ala Val Pro Pro Arg Ala Ser Phe Phe Phe Phe Leu Leu
1 5 10 15

Phe Phe Phe Ile Phe Leu Leu Phe Lys Phe Tyr Trp Lys Phe Thr Asn
20 25 30

Val Leu Gln Thr Ser Val Lys His His Ile His Phe Thr Gly His Gly
35 40 45

Ser Gln Ala Ser Val Gln Asn Ser Leu Trp Gln Ser Pro His Gln Gly
50 55 60

Leu Leu Gln Thr Phe Leu Thr Asn Ser Leu Thr Leu Asn Thr Glu His
65 70 75 80

Arg Leu Trp Pro Ala Ser Pro Ser Gln Ala Leu
85 90

<210> 106
<211> 77
<212> PRT
<213> Homo sapien

<400> 106

Met Val Val Gly Gln Thr Pro His Thr Ser Val Leu Gln Lys His Ala
1 5 10 15

Phe Val Cys Glu Lys Pro Gln Pro Ala Pro Thr Ser Val Leu Gln Glu
20 25 30

Ala Trp Val Leu Gly Glu Glu Ala Pro Gly Gln Arg Pro Pro Ala Ser
35 40 45

Leu Gln Glu Ala Trp Gln Leu Tyr Val Arg Lys Pro Arg Pro Ala Pro
50 55 60

Thr Ser Val Pro Ala Gly Gln Ala Trp Thr Val Asn Gly
65 70 75

<210> 107
<211> 116
<212> PRT
<213> Homo sapien

<400> 107

Met Arg Gly Thr Pro Phe Leu Ser Cys Val Ala Cys Leu Val Cys Ala
1 5 10 15

Ser Thr Leu Leu Phe Leu Ser Leu Ser Ser Leu Lys Met Tyr Asn Lys
20 25 30

Ile Ser Phe Leu Ala Pro Arg Leu Ser Pro Pro Gln Asn Lys Lys Lys
35 40 45

Lys Lys Lys Lys Lys Asn Pro Phe Phe Phe Phe Phe Phe Phe Phe Leu
50 55 60

Phe Phe Phe Phe Phe Phe Phe Ala His Asn Lys Asn Leu Leu Gly Glu
65 70 75 80

Arg Trp Leu Met Gly Gly Lys Ile Trp Ile Gln Glu Ser Ser Ile Leu
85 90 95

Ala Leu Ala Leu Ser Pro Asn Pro Pro Ser Leu Pro Glu Pro Arg Gly
100 105 110

Val Ser Pro Cys
115

<210> 108
<211> 46
<212> PRT
<213> Homo sapien

<400> 108

Met Val Thr Leu Leu Phe Ser Glu Pro Leu Leu Arg Ala Ser Gln Asp
1 5 10 15

Ile Met Arg Thr Asp Asn Leu Pro Trp Ser Gln Arg Pro Ser Leu Pro
20 25 30

Leu Ala Arg Met Phe Arg Asp Arg Gln Arg Gly Gln Trp Trp
35 40 45

<210> 109
<211> 55
<212> PRT
<213> Homo sapien

<400> 109

Met Trp Glu Leu Thr Glu Gln Tyr His His Arg Val Asn Lys Leu Trp
1 5 10 15

Thr Lys Asp Lys Ala Gln Ser Phe Phe Phe Phe Phe Phe Phe Phe Phe
20 25 30

Arg Leu Ser Thr Leu Leu Ser Cys Pro Gln Ala Pro Arg Asn Ile Leu
35 40 45

Ser Pro His Leu Glu Thr Asp
50 55

<210> 110
<211> 876
<212> PRT
<213> Homo sapien

<400> 110

Ala Ser Ala Gly Ala Ala Gly Ser Leu Thr Arg Ser Pro Ser Ser Asp
1 5 10 15

Phe Gln Gly Ala Ser Val Glu Lys Lys Met Ala Gln Val Leu His Val
20 25 30

Pro Ala Pro Phe Pro Gly Thr Pro Gly Pro Ala Ser Pro Pro Ala Phe
35 40 45

Pro Ala Lys Asp Pro Asp Pro Pro Tyr Ser Val Glu Thr Pro Tyr Gly
50 55 60

Tyr Arg Leu Asp Leu Asp Phe Leu Lys Tyr Val Asp Asp Ile Glu Lys
65 70 75 80

Gly His Thr Leu Arg Arg Val Ala Val Gln Arg Arg Pro Arg Leu Ser
85 90 95

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Ser Leu Pro Arg Gly Pro Gly Ser Trp Trp Thr Ser Thr Glu Ser Leu
            100                 105                 110

Cys Ser Asn Ala Ser Gly Asp Ser Arg His Ser Ala Tyr Ser Tyr Cys
        115                 120                 125

Gly Arg Gly Phe Tyr Pro Gln Tyr Gly Ala Leu Glu Thr Arg Gly Gly
    130                 135                 140

Phe Asn Pro Arg Val Glu Arg Thr Leu Leu Asp Ala Arg Arg Arg Leu
145                 150                 155                 160

Glu Asp Gln Ala Ala Thr Pro Thr Gly Leu Gly Ser Leu Thr Pro Ser
                165                 170                 175

Ala Ala Gly Ser Thr Ala Ser Leu Val Gly Val Gly Leu Pro Pro Pro
            180                 185                 190

Thr Pro Arg Ser Ser Gly Leu Ser Thr Pro Val Pro Pro Ser Ala Gly
        195                 200                 205

His Leu Ala His Val Arg Glu Gln Met Ala Gly Ala Leu Arg Lys Leu
    210                 215                 220

Arg Gln Leu Glu Glu Gln Val Lys Leu Ile Pro Val Leu Gln Val Lys
225                 230                 235                 240

Leu Ser Val Leu Gln Glu Glu Lys Arg Gln Leu Thr Val Gln Leu Lys
                245                 250                 255

Ser Gln Lys Phe Leu Gly His Pro Thr Ala Gly Arg Gly Arg Ser Glu
            260                 265                 270

Leu Cys Leu Asp Leu Pro Asp Pro Pro Glu Asp Pro Val Ala Leu Glu
        275                 280                 285

Thr Arg Ser Val Gly Thr Trp Val Arg Glu Arg Asp Leu Gly Met Pro
    290                 295                 300

Asp Gly Glu Ala Ala Leu Ala Ala Lys Val Ala Val Leu Glu Thr Gln
305                 310                 315                 320

Leu Lys Lys Ala Leu Gln Glu Leu Gln Ala Ala Gln Ala Arg Gln Ala
                325                 330                 335
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Asp Pro Gln Pro Gln Ala Trp Pro Pro Pro Asp Ser Pro Val Arg Val
            340                 345                 350

Asp Thr Val Arg Val Val Glu Gly Pro Arg Glu Val Glu Val Val Ala
        355                 360                 365

Ser Thr Ala Ala Gly Ala Pro Ala Gln Arg Ala Gln Ser Leu Glu Pro
    370                 375                 380

Tyr Gly Thr Gly Leu Arg Ala Leu Ala Met Pro Gly Arg Pro Glu Ser
385                 390                 395                 400

Pro Pro Val Phe Arg Ser Gln Glu Val Val Glu Thr Met Cys Pro Val
                405                 410                 415

Pro Ala Ala Ala Thr Ser Asn Val His Met Val Lys Lys Ile Ser Ile
            420                 425                 430

Thr Glu Arg Ser Cys Asp Gly Ala Ala Gly Leu Pro Glu Val Pro Ala
        435                 440                 445

Glu Ser Ser Ser Ser Pro Pro Gly Ser Glu Val Ala Ser Leu Thr Gln
    450                 455                 460

Pro Glu Lys Ser Thr Gly Arg Val Pro Thr Gln Glu Pro Thr His Arg
465                 470                 475                 480

Glu Pro Thr Arg Gln Ala Ala Ser Gln Glu Ser Glu Glu Ala Gly Gly
                485                 490                 495

Thr Gly Gly Pro Pro Ala Gly Val Arg Ser Ile Met Lys Arg Lys Glu
            500                 505                 510

Glu Val Ala Asp Pro Thr Ala His Arg Arg Ser Leu Gln Phe Val Gly
        515                 520                 525

Val Asn Gly Gly Tyr Glu Ser Ser Ser Glu Asp Ser Ser Thr Ala Glu
    530                 535                 540

Asn Ile Ser Asp Asn Asp Ser Thr Glu Asn Glu Ala Pro Glu Pro Arg
545                 550                 555                 560

Glu Arg Val Pro Ser Val Ala Glu Ala Pro Gln Leu Arg Pro Ala Gly
                565                 570                 575
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Thr Ala Ala Ala Lys Thr Ser Arg Gln Glu Cys Gln Leu Ser Arg Glu
580 585 590

Ser Gln His Ile Pro Thr Ala Glu Gly Ala Ser Gly Ser Asn Thr Glu
595 600 605

Glu Glu Ile Arg Met Glu Leu Ser Pro Asp Leu Ile Ser Ala Cys Leu
610 615 620

Ala Leu Glu Lys Tyr Leu Asp Asn Pro Asn Ala Leu Thr Glu Arg Glu
625 630 635 640

Leu Lys Val Ala Tyr Thr Thr Val Leu Gln Glu Trp Leu Arg Leu Ala
645 650 655

Cys Arg Ser Asp Ala His Pro Glu Leu Val Arg Arg His Leu Val Thr
660 665 670

Phe Arg Ala Met Ser Ala Arg Leu Leu Asp Tyr Val Val Asn Ile Ala
675 680 685

Asp Ser Asn Gly Asn Thr Ala Leu His Tyr Ser Val Ser His Ala Asn
690 695 700

Phe Pro Val Val Gln Gln Leu Leu Asp Ser Gly Val Cys Lys Val Asp
705 710 715 720

Lys Gln Asn Arg Ala Gly Tyr Ser Pro Ile Met Leu Thr Ala Leu Ala
725 730 735

Thr Leu Lys Thr Gln Asp Asp Ile Glu Thr Val Leu Gln Leu Phe Arg
740 745 750

Leu Gly Asn Ile Asn Ala Lys Ala Ser Gln Ala Gly Gln Thr Ala Leu
755 760 765

Met Leu Ala Val Ser His Gly Arg Val Asp Val Val Lys Ala Leu Leu
770 775 780

Ala Cys Glu Ala Asp Val Asn Val Gln Asp Asp Asp Gly Ser Thr Ala
785 790 795 800

Leu Met Cys Ala Cys Glu His Gly His Lys Glu Ile Ala Gly Leu Leu

805 810 815

Leu Ala Val Pro Ser Cys Asp Ile Ser Leu Thr Asp Arg Asp Gly Ser
820 825 830

Thr Ala Leu Met Val Ala Leu Asp Ala Gly Gln Ser Glu Ile Ala Ser
835 840 845

Met Leu Tyr Ser Arg Met Asn Ile Lys Cys Ser Phe Ala Pro Met Ser
850 855 860

Asp Asp Glu Ser Pro Thr Ser Ser Ser Ala Glu Glu
865 870 875